

**ABSTRACT**

A system and method for providing transparent mobility support employs a mobile service in an API layer of an

5 operating system to leverage the capability of a session establishment service that implements the Session Initiation Protocol or the like for locating a remote node for session setup and detecting address change of the remote node. When an application on a correspondent host (CH) wants to  
10 communicate with a second application on a mobile host (MH), the mobility service of the CH uses the session establishment service to locate the mobile host and set up a session with it, and then sets up a transport data channel for the session. When the MH changes its network address, the session  
15 establishment service of the CH finds out the new address through the operation of the session establishment protocol and reestablishes the session with the MH. The new address of the MH is then communicated to the CH's mobility service, which resets the data channel to connect to the new address,  
20 thereby allowing communication data from the first application to continue to flow to the MH.